AUT SUSTAINABILITY REPORT 2024

CONTENTS

We encourage you to read this report online, rather than printing it.

FOREWORD FROM THE VICE-CHANCELLOR

Manaaki whenua, manaaki tangata. Haere whakamua.

Care for the land, care for the people. Go forward.

This whakataukī reminds us that sustainability is not just a goal – it is a responsibility, a relationship, and a journey. At AUT, we are committed to walking this path with purpose, guided by the values of care, equity and innovation.

AUT's strategy *Te Kete* called for bold climate action, a net zero carbon university and development of regenerative approaches to sustainability. These are not abstract ambitions – they are directives that shape our decisions and define our future. As we develop AUT's new Sustainability Plan, expect to see this directive reflected in the objectives we set and the initiatives we implement.

AUT participates in annual sustainability rankings as part of our commitment to transparency, accountability and continuous improvement. In 2024, Times Higher Education (THE) Impact rankings, AUT placed in the top 200 universities (out of 2,318 institutions) for our progress towards the UN Sustainable Development Goals. We ranked in the top 50 for Gender Equality (=26th) and Decent Work and Economic Growth (=33rd), and in the top 100 for Responsible Consumption and Production (=83rd), and Partnerships for the Goals (=94th). These results reflect our growing impact and our commitment to equity and collaboration.

In the QS Sustainability Rankings, AUT placed =262nd worldwide, including 32nd for equality and 125th for governance. While this marks a decline from last year's ranking (201st), it also highlights areas where we must do better. Amongst other initiatives we are investigating the application of solar PV across our campuses to improve our environmental performance.

One of our proudest achievements in 2024 was AUT being Highly Commended in the Australasian Green Gown Awards. The recognition came from two initiatives: on-site sorting of general waste, recycling and organic waste bins at the university's campuses – diverting 40% (or 210 tonnes) of general waste from landfill, and the diversion of 90% (or nearly 300 tonnes) of construction and demolition (C&D) waste from landfill during the refurbishment and construction of Tukutuku at our North Campus. These efforts, in partnership with OCS and Naylor Love, show what is possible when we work together with purpose.

AUT also joined a coalition of New Zealand tertiary education institutions that won the Powerful Partnerships category in the same awards for the climate scenarios project, *From Sweet As to Oh Bugger*. This initiative created a flexible framework for climate change planning across the sector following a consistent approach, while also being adaptable to our own institutions.

As we progress forward with developing AUT's Sustainability Plan, our challenge is not only to plan but to act – to turn aspiration into implementation. This will require the collective effort of our staff, students and partners to innovate, adapt and overcome challenges.

Manaaki whenua, manaaki tangata. Haere whakamua!

Let us care for the land and care for the people, as we go forward – together.

Professor Damon Salesa
Vice-Chancellor

CO-CHAIRS OF THE SUSTAINABILITY STEERING COMMITTEE

INTRODUCTION

Te Wānanga Aronui o Tāmaki Mākau Rau has continued to achieve some sustainability outcomes during 2024. There continues to be more that we can achieve.

LEARNING AND TEACHING

In 2024, 4,604 students were enrolled in one or more sustainability-focused courses (17% of AUT students). Since 2020, the number of students enrolled in one or more sustainability-focused courses has increased by 7%. The Architectural Engineering major was refreshed for 2024 and included the incorporation of two sustainability-focused courses. The courses are Year 1 Introduction to Sustainable Engineering Design and a Year 3 course – Sustainable Design and Development. Learning outcomes from these courses include prioritising proactive environmental design, focusing on circular lifecycles, conserving resources, emphasising renewable energy sources and passive design to deliver sustainable design.

Third-year Bachelor of Design Te Tohu Paetahi mō te Hoahoa student Jacob Smith, who majors in Industrial Design, developed Woo-Lace as part of a project in the School of Art and Design's strong wool studio course. As well as being biodegradable and made from sustainably sourced strong wool from a farm in the Wairarapa, the laces are dyed using food waste – onion, avocado skin and coffee grounds. Unlike regular laces – that are commonly made from materials like polyester or nylon, which can take hundreds of years to decompose, Woo-Laces can be composted. In 2024 Woo-Lace – by Steaddi – was named as a finalist in the New Zealand Sustainable Business Network awards. Woo-Lace is now available for purchase online.

RESEARCH

The Regenerative Environments Research Network was created in 2024. It is one of five tier 4 research networks and represents university-wide priority research themes which are deliberately trans/cross disciplinary. The internally funded network provides an opportunity for staff and postgraduate research students to unite around the theme of regenerative environments and to collectively undertake a range of research projects and programmes that make a substantive difference.

AUT had 461 publications that contribute to one or more SDGs in 2024 (34% of all outputs). This remains a significant increase from the 17% in 2020 and represents an increase in the proportion of publications when compared with 2023 (30%).
Source – Dimensions

AUT's Dr Mahsa Mohaghegh, Senior Lecturer at the School of Engineering, Computer and Mathematical Sciences received a prestigious Fulbright Scholarship to explore the integration of artificial intelligence into beekeeping. Artificial intelligence systems will be trained to analyse and interpret a bees' buzz and use this buzz for precise beekeeping. The research aims to enhance precision beekeeping, reduce biosecurity risks, while safeguarding the food supply chain, promoting environmental sustainability, and involving beekeepers in the scientific endeavour.

OPERATIONS

AUT's CO_2e emissions in 2024 were 9,104 CO_2e tonnes, a 33% decrease compared to our 2018 baseline year. Emissions from air travel increased between 2023 and 2024, and it contributed to about 30% of AUT's total emissions. Work to reduce emissions from air travel has begun. Many of the CO_2e reductions that we achieved during the pandemic continue to be realised. Along with additional work to reduce emissions from natural gas, improve energy efficiency and using space efficiently.

CO_2e emissions associated with air travel have decreased by 39% since 2018, from 4,546 tonnes down to 2,755. The initial savings achieved due to pandemic-related restrictions, and the AUT Travel Policy, has supported this decrease, and as mentioned above, emissions from air travel are tracking upwards with a 20% increase between 2023 and 2024. Mechanisms to achieve reductions whilst maintaining international research collaborations and partnerships, were presented to senior leaders for their input and will be further developed in 2025.

The now defunct State Sector Decarbonisation Fund provided co-funding to remove gas boilers and old chillers in WM and WH buildings and replace them with electric alternatives. This initiative collectively cost $5.8 million and AUT provided 60% of the total cost. Work began on both WH and WM in 2024, both systems are operational and are now being fine-tuned. It is estimated that the two projects will reduce AUT's CO_2e emissions by approximately 114 tonnes per year.

In 2024, a group of AUT Manaaki Scholars participated in a native tree planting session and a working bee at the māra kai (food garden), both at AUT's South Campus. This group was inspired by their experience and formed Manaaki Sustainability at AUT. Together they are maintaining, harvesting and planting 25m^2 of the māra kai. They have planted broccoli, herbs, spinach, lettuce and cabbage. Guided by the principle of manaakitanga, they aim to honour the kindness and support they received upon their arrival in Aotearoa New Zealand through this simple but meaningful project. Manaaki Sustainability intends to grow their membership in 2025 and form Green Impact teams (Green Impact is AUT's sustainability behaviour change programme) to further contribute to sustainability at AUT.

We expect this will be our final sustainability report where we report against our 2018 Sustainability Plan. Over that time, we have learnt a lot and these learnings are being applied to the development of AUT's new sustainability plan, along with the strong strategic direction from Te Kete and Te Aronui.

Professor Mark Orams

Deputy Vice-Chancellor Research
Co-Chair of the Sustainability Steering Committee

Associate Professor Amanda Yates

Co-Chair of the Sustainability Steering Committee,
Ngāti Rangiwewehi, Ngāti Whakaue, Te Aitanga a Māhaki, Rongowhakaata

OVERVIEW OF KEY TARGETS

The overview of key targets below highlights where we are progressing well and where more focus is needed.

LEARNING AND TEACHING – MOHIO-ORA

ALL UNDERGRADUATE PROGRAMMES DEVELOP SUSTAINABILITY LITERACY, VALUES AND PRACTICES

↓7
compulsory sustainability courses offered compared to 2020

MORE STUDENTS HAVE ACCESS TO SUSTAINABILITY MAJORS, MINORS OR COURSES

↑23
sustainability-focused courses and **+1,701** students enrolled since 2020

0
No additional degrees with a sustainability major or minor compared with 2020

RESEARCH – MOHIO-ORA

INTERNAL FUNDING THAT SUPPORTS SUSTAINABILITY RESEARCH PROJECTS

1 Creation of Regenerative Environments Research Network – Tier 4 research network

INCREASING PEER REVIEWED SDG RESEARCH OUTPUTS

461 research outputs contributed to a UNSDG

↑17%
since 2020
(Source: Dimensions)

EXTERNALLY FUNDED SUSTAINABILITY RESEARCH PROJECTS

117 externally funded SDG-related research projects generated **$31.4 million**

↑41 from 2020

PARTNERSHIP AND COMMUNITY – HAPORI-ORA

AUT BECOMING A FAIRTRADE REGISTERED ORGANISATION

Only Fairtrade coffee is sold at AUT cafes.
4.1 tonnes of Fairtrade coffee consumed

↓2 tonnes from 2020

LOW CARBON – HIHIRI-ORA

CO_2e REDUCED BY 50% BY 2025

↓33%
decrease since 2018*

CO_2e FROM ENERGY REDUCED BY 50% BY 2025

↓35%
decrease since 2018*

CARBON FOOTPRINT OF OUR ICT USAGE

↑46
tonnes increase since 2018**

WATER – WAI-ORA

MAINS WATER REDUCED BY 20% BY 2025

↑2%
increase since 2018

WASTE - PARAU

HALVE WASTE TO LANDFILL BY 2025

60% waste sent to landfill
40% composted and recycled

*AUT's CO_2e emissions inventory is independently verified against ISO 14064-1 Greenhouse Gases

**The 46 tonnes increase is because we reported on our emissions associated with Microsoft 365 data usage for the first time in 2024.

AUT AND SUSTAINABILITY IN 2024

AUT is making progress towards several sustainability goals, including a 33% reduction in carbon emissions since 2018. This has largely come from a reduction in air travel, a reduction in the carbon footprint of grid supplied electricity, and more efficient energy systems at AUT. We are continuing to work to reduce emissions from sources where we have a higher level of control. The remaining opportunities for reducing emissions lie outside of AUT's direct control, such as those associated with student and staff commuter travel. Our travel surveys show our people are generally high users of sustainable transport, although this is more limited at South and North Campuses. We continue to promote and support sustainable commuting options and to use our influence with Auckland Transport to lift the uptake of sustainable travel to our campuses.

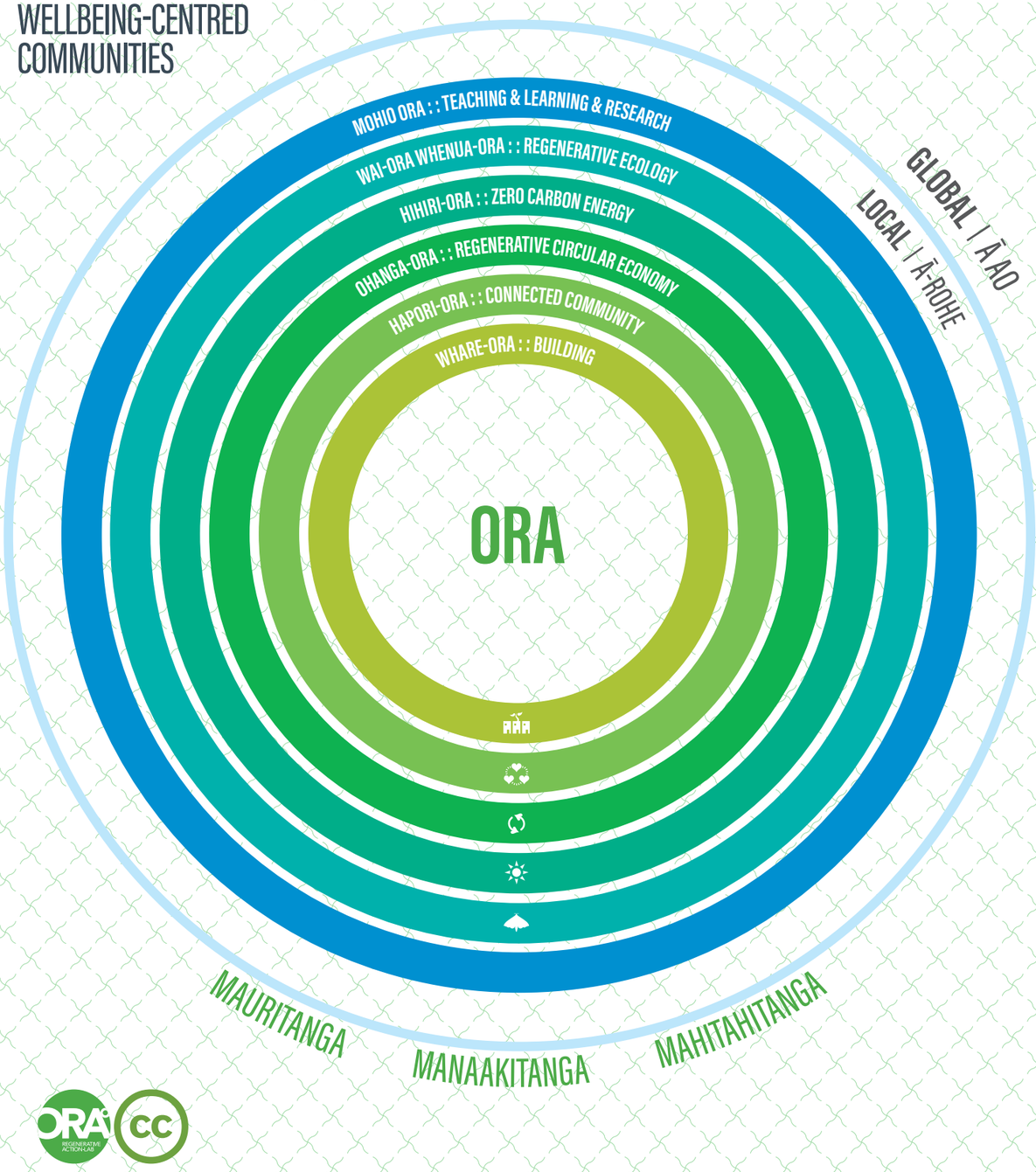
The Mauri Ora Regenerative Action Compass first featured in AUT's Sustainability Report in 2021. It was developed by AUT's Associate Professor Amanda Yates and is being used within organisations as a tool to support transformative regeneration that is indigenous–led and grounded in te ao Māori. Within this report it is also being used to communicate how each target connects with the different ora, shown in the compass.

AUT'S NEW SUSTAINABILITY PLAN

Te Kete encourages bold climate action, a net zero carbon university and developing regenerative approaches to sustainability. The next AUT Sustainability Plan will reflect this strong and progressive guidance. We have begun work on determining the central objectives of the new sustainability plan. It will also include initiatives associated with each objective, KPIs and funding to achieve the objectives of the plan.

NGĀ TOHU
MAURI ORA
REGENERATIVE ACTION
COMPASS

A TRANSITION TOOL
FOR RESILIENT, ECOLOGICAL, WELLBEING-CENTRED COMMUNITIES



THEME 1:
CREATING EXCEPTIONAL LEARNING EXPERIENCES – LEARNING AND TEACHING

Teaching provides our students learning and understanding of sustainability principles that they can transfer into workplaces both nationally and internationally.

THEME 1 – TARGETS TO 2025

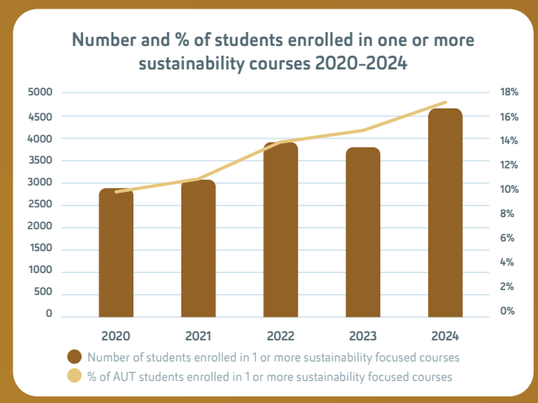
TARGET	INFORMATION RELATED TO THE TARGETS	MAURI ORA COMPASS/SDGS
Ensure all undergraduate programmes develop sustainability literacy, values and practices, consistent with the AUT Graduate Profile **STATUS: NOT ACHIEVED**	There were 27 compulsory sustainability-focused[1] courses offered in AUT programmes, majors or minors. This is a decrease of seven when compared with 2020.	Mohio-ora, Ki Tua 4 QUALITY EDUCATION
Increasing number of students will have access to majors, minors or courses with a sustainability orientation **STATUS: ACHIEVED**	4,604 students were enrolled in one or more sustainability-focused courses (17%). This has increased by 7% since 2020. Seven sustainability majors or minors were offered within undergraduate programmes. There has been no increase in this number since 2020. The number of sustainability-focused courses increased from 67 to 90 over the same time.[2]	Mohio-ora, Ki Tua 4 QUALITY EDUCATION
All students will have the opportunity to work on an interdisciplinary project that encompasses the concepts of wellbeing, futures-thinking and connectivity **STATUS: IN PROGRESS**	The concepts of wellbeing, futures-thinking and connectivity were in part covered through the in-class Work Integrated Learning (WIL) preparation programme, delivered by Brightside Tupuranga Ake to final-year students in the Bachelor of Architecture and Future Environments, Bachelor of Education (Early Childhood Teaching), and the Bachelor of International Hospitality Management. It covers essential workplace skills, such as communication, teamwork, performance, wellbeing and resilience, tailored to the specific characteristics of each industry.	Mohio-ora, Ki Tua 4 QUALITY EDUCATION
Develop climate emergency and zero-carbon system change curriculum materials for academics **STATUS: IN PROGRESS**	We refreshed the Architectural Engineering major and included two sustainability-focused courses, Introduction to Sustainable Engineering Design (Year 1), and Sustainable Design and Development (Year 3). The learning outcomes include prioritising proactive environmental design, focusing on circular lifecycles, conserving resources, renewable energy sources and passive design.	Mohio-ora, Ki Tua 4 QUALITY EDUCATION 13 CLIMATE ACTION

1. Sustainability-focused courses – these include courses where the primary explicit focus is on sustainability, the application of sustainability within a field and/or understanding or solving one or more major sustainability challenge(s) (Source – AASHE – Sustainability Tracking, Assessment and Rating System)
2. Some natural flux in numbers is expected as not all courses are offered every year.

WOO-LACE

Jacob Smith, a second-year Bachelor of Design Te Tohu Paetahi mō te Hoahoa student, took up a challenge laid down by his lecturers, Dr Jyoti Kalyanji and Dan Collings, and members of the New Zealand wool industry. The task was to design a product using strong wool, which is a locally produced fibre that often goes to waste due to its low market price. Smith, who majors in Industrial Design, designed the Woo-Lace – a biodegradable, sustainably sourced shoelace made with strong wool from Palliser Ridge Farm in the Wairarapa. The laces are dyed with natural products such as onion, avocado skins and coffee grounds. While regular polyester or nylon laces can take hundreds of years to decompose into micro plastics, Woo-Laces are fully home compostable. Steaddi, the company Smith established with support from AUT Ventures, was a finalist in the 2024 New Zealand Sustainable Business Network awards.
The Woo-Lace can be bought from **steaddi.co.nz**

4 QUALITY EDUCATION 12 RESPONSIBLE CONSUMPTION AND PRODUCTION



THEME 2:
DISCOVERY AND APPLICATION OF KNOWLEDGE FOR WELLBEING AND PROSPERITY – RESEARCH

Through AUT's world leading research we seek to provide improved outcomes for Aotearoa New Zealand, our people and international communities.

THEME 2 – TARGETS TO 2025

TARGET	INFORMATION RELATED TO THE TARGETS	MAURI ORA COMPASS/SDGS
Increase the number of mission-led and large-scale projects on the critical issues of our time, including projects which are tackling aspects of the climate emergency STATUS: IN PROGRESS	Academics within the School of Future Environments undertook a research project that argues for local renewable energy generation, integrated into communities, to improve New Zealand's energy security and disaster preparedness. The project identified how rooftop space across Auckland can be better utilised through the installation of solar photovoltaics (using the sun to create electricity). This creates a more sustainable, and resilient city, bringing the power production closer to the consumption.	Wai-ora, Whenua-ora, Ki Tua 7 AFFORDABLE AND CLEAN ENERGY · 11 SUSTAINABLE CITIES AND COMMUNITIES · 13 CLIMATE ACTION
Providing internal funding mechanisms which support research projects that advance knowledge and its application to sustainability STATUS: IN PROGRESS	The Regenerative Environments Research Network was created in 2024. It is one of five top-tier research networks, representing university-wide priority research themes which are deliberately trans/cross disciplinary. The internally funded network provides an opportunity for staff and postgraduate research students to unite around an important area of focus and to collectively undertake a range of research projects and programmes that make a substantive difference.	Hapori-ora, Mauri-ora 17 PARTNERSHIPS FOR THE GOALS
Host annual research events addressing climate emergency responses and system change (mitigation, adaptation, transformation) STATUS: ACHIEVED	The School of Future Environments hosted New Zealand's first International Group for Lean Construction (IGLC) conference in July. Lean construction aims to improve the productivity and sustainability of the building and infrastructure industry, which currently contributes between 15%-20% of Aotearoa's total carbon emissions. AUT also hosted the International Conference of Smart and Sustainable Built Environment, which covered themes such as climate change adaptation, indigenous design and sustainability management, as well as sustainable supply chains.	Whenua-ora, Wai-ora, Whanaungatanga 12 RESPONSIBLE CONSUMPTION AND PRODUCTION · 13 CLIMATE ACTION · 17 PARTNERSHIPS FOR THE GOALS
Increasing numbers of peer reviewed research outputs that contribute to the United Nations' Sustainable Development Goals STATUS: IN PROGRESS	AUT had 461 publications that contributed to one or more SDGs in 2024 (34% of all outputs). This is a significant increase from 2020 (17%) and a further increase from 2023 (30%). Source – Dimensions	Mohio-ora, Ki Tua All SDGs

Note: Only key research targets are being reported on in the 2024 report.

WASTE GLASS FOR ROAD CONSTRUCTION

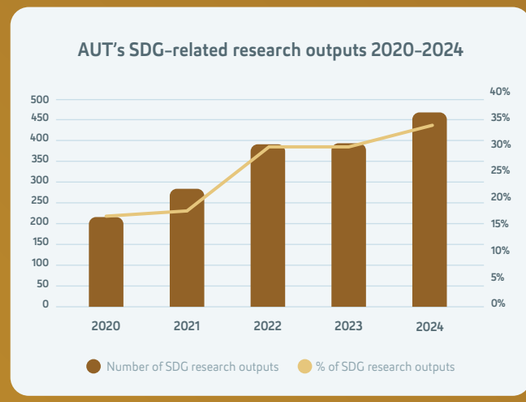
Dr Roohollah Kalatehjari (School of Future Environments) identified a sustainable solution for stabilising roads in the central North Island, using waste glass that would otherwise go to landfill.
The soils are largely pumice, which is light, porous, easily crushed, and more susceptible to erosion than other soil types. Because they can't support heavy loads, pumice soils pose a unique challenge for roading projects and must be stabilised before a road can be built. Traditionally, lime or cement are used for stabilisation, both of which have a high carbon footprint. Dr Kalatehjari's research found that stabilising pumice soils using waste alkali-activated glass could lower carbon emissions by up to 21%.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION · 15 LIFE ON LAND

AI BEE RESEARCH CREATES A BUZZ

Dr Mahsa Mohaghegh (School of Engineering, Computer and Mathematical Sciences) received a prestigious Fulbright Scholarship to explore the integration of artificial intelligence into beekeeping. Artificial intelligence systems will be trained to analyse and interpret bees' buzzes, using the sounds for precise beekeeping. The research aims to enhance precision beekeeping and reduce biosecurity risks, while safeguarding the food supply chain, promoting environmental sustainability, and involving beekeepers in the scientific endeavour.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE · 15 LIFE ON LAND



THEME 3:
RESPONDING TO OUR PLACE IN THE WORLD – PARTNERSHIPS AND COMMUNITY

A partnership approach to addressing sustainability challenges is more likely to achieve significant positive change. AUT continues to seek and solidify existing partnerships with the aim of creating more progress.

THEME 3 – TARGETS TO 2025

TARGET	PROGRESS TOWARDS THE TARGETS	MAURI ORA COMPASS/SDGS
Establishing partnerships with external organisations based on working together towards the UN Sustainable Development Goals and/or becoming low carbon STATUS: IN PROGRESS	Reflecting how art can inspire and encourage change, AUT was part of a group hosting the Trouble in Paradise – Climate Change in the Pacific photographic exhibition at the Commonwealth Heads of Government Meeting in Samoa. The exhibition depicts the effects of the climate crisis on the Pacific region and was presented by the British Council in New Zealand and the Pacific in partnership with AUT, the British High Commissions in Wellington and Apia, the Ministry of Foreign Affairs and Trade, and the Samoan Ministry of Education and Culture.	Mohio-ora, Hapori-ora, Mauri ora, Whanaungatanga 13 CLIMATE ACTION · 17 PARTNERSHIPS FOR THE GOALS
Working towards AUT becoming a Fairtrade-registered organisation STATUS: NOT ACHIEVED	Only Fairtrade-certified coffee is sold in the cafés on AUT's three campuses – 4.1 tonnes of fairtrade coffee was consumed in 2024, an increase of about a tonne when compared to 2023 and about two-thirds of that consumed in 2020. AUT became a Fairtrade Supporting Workplace in 2024.	Whenua-ora, Wai-ora, Hapori-ora, Whanaungatanga 12 RESPONSIBLE CONSUMPTION AND PRODUCTION

FROM SWEET AS TO OH BUGGER

AUT and a coalition of New Zealand tertiary education institutions won the Powerful Partnerships category in the 2024 Australasian Green Gown Awards. The climate scenarios project, 'From Sweet As to Oh Bugger' creates a flexible framework for tertiary providers to ensure their climate change planning follows a consistent approach, while being adaptable to their own needs. Following on from the sector wide project, AUT established a Climate Scenarios Working Group and has begun identifying what aspects of the sector wide scenarios are most relevant to AUT.

13 CLIMATE ACTION · 17 PARTNERSHIPS FOR THE GOALS

FOOD WASTE BIN DESIGN

Professor Mark Boocock and Liz Ashby (School of Clinical Sciences) worked with Auckland Council on the design of the household food waste bins. They used 3D digital models to help design bins that are safer for collectors to use. As one example, the taller handles reduce the amount of bending and flexing required while collecting the bins, thus putting less strain on the body for collectors and encouraging more use by households. The project received the Best Overall Contribution to Improving Workplace Health and Safety and the Innovation award at the New Zealand Workplace Health and Safety Awards.

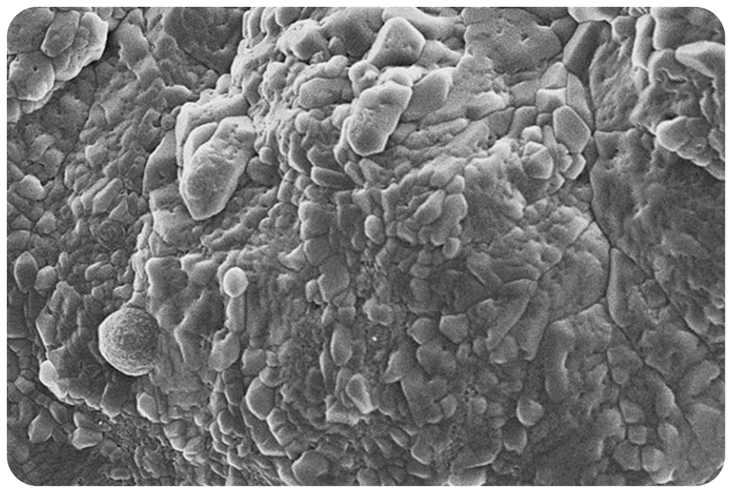
12 RESPONSIBLE CONSUMPTION AND PRODUCTION · 17 PARTNERSHIPS FOR THE GOALS

THEME 4:
BUILDING OUR POSITION AS NEW ZEALAND'S UNIVERSITY OF TECHNOLOGY – LEADERSHIP

Through the Australasian Green Gown awards, AUT was recognised as a leader in reducing general waste and construction and demolition waste sent to landfill.

THEME 4 – TARGETS TO 2025

TARGET	INFORMATION RELATED TO THE TARGETS	MAURI ORA COMPASS/SDGS
Generating sustainability research projects across AUT that attracts external financial support **STATUS: ACHIEVED**	We signed 125 new research contracts (total value of $31.45 million) in 2024, of which 117 projects were related to the SDGs ($31.44 million). As with previous years, there was a prevalence of contracts related to SDG 3 Good Health and Wellbeing and SDG 10 Reduced Inequalities. The largest contract of the year was for $6 million from the Ministry for Business, Innovation and Employment for a five-year investigation into boosting productivity growth by creating equal workplace opportunities for all.	Mohio-ora, Whanaungatanga All SDGs
Demonstrating innovation in sustainability professional practice within the curriculum and our research **STATUS: IN PROGRESS**	Spherelose® is the ground-breaking technology created by Dr Jack Chen, Dr Andres Tiban and Dr Mohinder Naiya, where sustainable surfactants are created from cellulose particles. Spherelose exemplifies the intersection of chemistry, sustainability and innovation. This is a scalable, renewable, biodegradable and safe alternative to the 20 million tonnes of mostly petrochemical-derived surfactants used each year that end up in our oceans and soil. Spherelose was selected to be part of Ministry of Awesome's Founder Catalyst start-up programme and received more funding to accelerate the research and for business development activities.	Mohio-ora, Whanaungatanga 4 QUALITY EDUCATION · 11 SUSTAINABLE CITIES AND COMMUNITIES · 13 CLIMATE ACTION

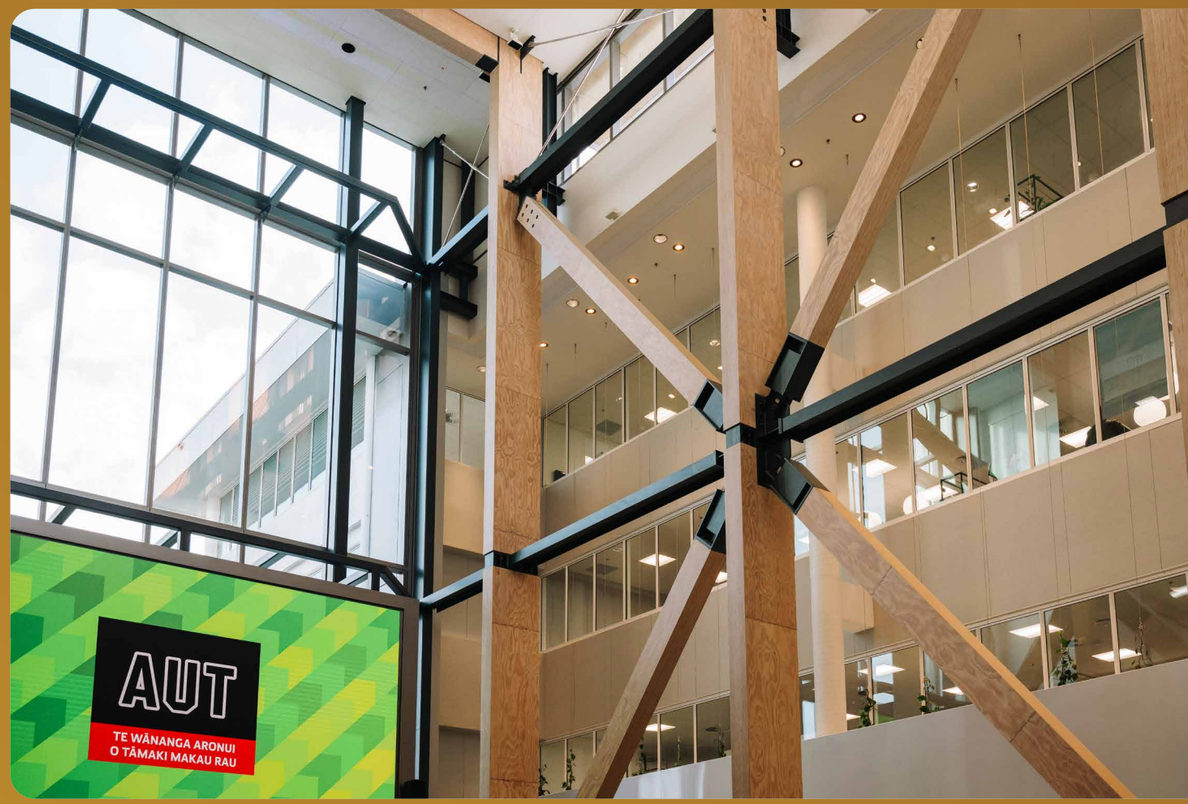


Under the microscope: Hundreds of Spherelose particles attaching themselves to the surface of oil globules

NO TIME TO WASTE

AUT was recognised for our waste reduction initiative with a Highly Commended award at the 2024 Australasian Green Gown Awards. The initiative reflects two key components: on-site waste sorting and the diversion of waste from a large construction project. In partnership with our cleaning services provider, OCS, AUT sorts general waste, recycling and organic waste on our three campuses, diverting around 40% of general waste from landfill. AUT is one of only several organisations in Aotearoa New Zealand undertaking on-site sorting. During the construction of Tukutuku building at North Campus, our contractors Naylor Love were able to divert 90% (almost 300 tonnes) of construction and demolition waste away from landfill.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION · 17 PARTNERSHIPS FOR THE GOALS



THEME 5:
BEING A PLACE WHERE PEOPLE LOVE TO WORK AND LEARN – SUSTAINABILITY ON CAMPUS

Implementation of sustainability initiatives on our campuses is one of the main ways in which students and staff see AUT's progress with sustainability operations. Our annual Green Impact competition provides an avenue for a growing number of staff and students to enact sustainability through their work, study and personal lives.

THEME 5 – BIODIVERSITY TARGET TO 2025

TARGET	INFORMATION RELATED TO THE TARGETS	MAURI ORA COMPASS/SDGS
Preferring indigenous planting, where appropriate STATUS: ACHIEVED	During 2024, 524 native trees were planted across our three campuses. Some of the trees were mānuka, kauri, miro and rewarewa. A total of 600 native ground covers and shrubs were also planted, including harakeke, oioi and coprosma kirkii. Many of these plants and trees were planted during two staff and two student planting sessions at North and South Campuses.	Whenua-ora, Mauri-ora 15 LIFE ON LAND

NATIVE TREE PLANTING BY STAFF AND STUDENTS

Staff and students planted 1,100 native plants and trees on our campuses during the year, which will improve the biodiversity of our environment and help regenerate the land. Assisted by our Estates group, the Kin Staff Network planted 400 mānuka seedlings at North Campus to provide a food source for our native bee population. The ICT department planted 400 oioi (native rushes) in swales to help filter stormwater. Our international students also contributed, planting 300 harakeke, coprosma kirkii, and manuka at North and South Campuses.

15 LIFE ON LAND

THEME 5 – TRANSPORT TARGETS TO 2025

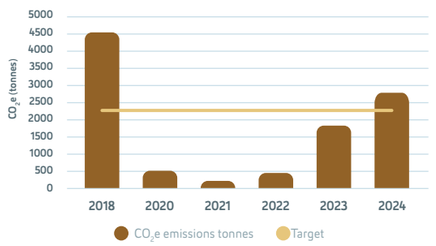
TARGET	INFORMATION RELATED TO THE TARGETS	MAURI ORA COMPASS/SDGS
85% of staff and students take sustainable transport to/from the University STATUS: NOT ACHIEVED	Our annual travel survey showed that 62% of staff and 69% of students adopt a form of sustainable transport for their regular commute, including cycling, walking, or public transport. While these are good results, they remain well below target. We also noted a marked decline in staff use of sustainable transport (down from 71% in 2023), whilst student use of sustainable transport remained steady between 2023 and 2024. There were also some significant differences in travel patterns across the three main campuses. City Campus is well served by public transport and cycling networks; 71% of staff and 88% of students adopt sustainable modes. These figures are much lower at North and South Campuses, where fewer than a third of staff and half of students use sustainable transport. As well as promoting and providing facilities to support low-emission travel at each of our campuses, we continue to advocate with Auckland Transport for improved connectivity at North and South Campuses.	Waka-ora, Whanaungatanga 11 SUSTAINABLE CITIES AND COMMUNITIES 13 CLIMATE ACTION
50% reduction in emissions from air travel STATUS: IN PROGRESS	CO_2e emissions associated with air travel have decreased by 39% since 2018, from 4,546 tonnes to 2,755. The pandemic sparked a significant initial decline in emissions; we subsequently introduced a new Travel Policy that aims to balance the imperative to reduce emissions along with supporting the development of our academic staff. Air travel-related emissions increased 20% between 2023 and 2024. Mechanisms to achieve reductions, whilst maintaining international research collaborations, were presented to senior leaders for their input and will be further developed in 2025.	Waka-ora, Whanaungatanga 13 CLIMATE ACTION

REMOVAL OF GAS BOILERS

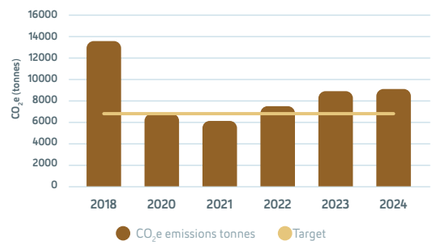
We received funding from the former State Sector Decarbonisation Fund to help with the cost of installing efficient, electric heating and cooling systems in WM and WH buildings on City Campus, replacing old gas boilers and chillers. AUT contributed 60% of the total cost of the project ($5.8 million), which began in 2024. The units are now operational and being fine-tuned; we estimate the new systems will reduce our CO_2e emissions by approximately 114 tonnes per year.

7 AFFORDABLE AND CLEAN ENERGY
13 CLIMATE ACTION

CO_2e emissions from air travel 2020–2024 compared to base year 2018



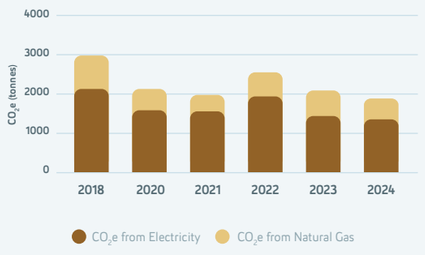
AUT's CO_2e emissions 2020–2024 compared to base year 2018



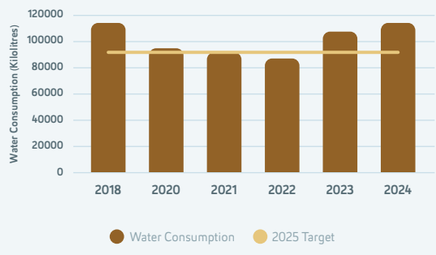
AUT'S CO_2e EMISSIONS INVENTORY

	EMISSIONS SOURCE	CO_2e (TONNES)	PERCENTAGES
SCOPE 1	Fuel	47	0.5%
	Refrigerants	139	1.5%
	Natural gas	674	7.4%
	LPG	2	0.0%
SCOPE 2	Electricity (location based)	1,254	13.8%
SCOPE 3	Freight (Road)	0	0.0%
	Air travel	2,755	30.3%
	Taxis	7	0.1%
	Mileage	55	0.6%
	Rental cars	6	0.1%
	Hotels	194	2.1%
	Staff commuter travel	642	7.1%
	Student commuter travel	2,765	30.4%
	WFH	42	0.5%
	Shuttle bus	143	1.6%
	Waste	107	1.2%
	Transmission & distribution losses	117	1.3%
	Paper consumption	25	0.3%
	Water & wastewater	60	0.7%
	Data centres	71	0.8%
	Grand total	**9,104**	**100%**
	% change compared to 2018 baseline year		**-33%**

CO_2e from Electricity and Natural Gas 2020-2024 compared to base year 2018



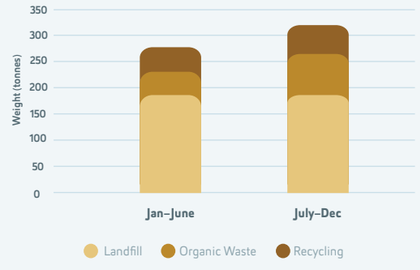
AUT's Mains Water consumption 2020-2024 compared to base year 2018



THEME 5 – CO_2e EMISSIONS, WATER AND WASTE TARGETS

TARGET	INFORMATION RELATED TO THE TARGETS	MAURI ORA COMPASS/SDGS
Carbon emissions halved by 2025 **STATUS: IN PROGRESS**	We emitted 9,104 tonnes of CO_2e in 2024, a 33% decrease from 2018. We have maintained many of the reductions achieved during the pandemic, along with additional work to reduce emissions from natural gas, to improve our energy efficiency, and to use space more effectively. Emissions from air travel increased from 2023; as discussed above we are continuing work to address this issue.	Hihiri-ora, Ki-tua 13 CLIMATE ACTION
Emissions from energy reduced by 50% by 2025 **STATUS: IN PROGRESS**	We produced 1,930 tCO_2e from energy consumption in 2024, a reduction of 35% since 2018. This is largely due to a reduction in the carbon footprint of grid supplied electricity; it has reduced by 30% since 2018. Also, gas consumption is down by 1 million kWh, and a further reduction of around 3 million kWh in electricity over the same period.	Hihiri-ora, Ki-tua 7 AFFORDABLE AND CLEAN ENERGY 13 CLIMATE ACTION
Mains water reduced by 20% by 2025 **STATUS: NOT ACHIEVED**	We consumed 116,492kL, which is 2% more than our baseline year. Our newest building, Tukutuku, includes two 30,000kL rainwater harvesting tanks that are used for flushing toilets and irrigation. While this will go some way towards reducing demand for mains water, major investment would be required to have a significant impact on our water consumption.	Wai-ora, Ki-tua 6 CLEAN WATER AND SANITATION
Waste reduced by 50% by 2025 **STATUS: IN PROGRESS**	Thanks to our waste sorting project, we sent 64% of waste to landfill in 2024, with the remainder going to recycling and compost. This is down from 80% of our waste going to landfill in 2018. Since 2018, AUT has achieved a 50% reduction in emissions (100 tCO_2e) associated with waste to landfill and food waste/ compostables. We anticipate further improvements in 2025, as we only commenced waste sorting at North Campus and student accommodation on City Campus towards the end of the year. During that period, the recycling/compostables rate increased to 43% overall. We are also testing further waste sorting resources and holding waste reduction campaigns to encourage behaviour change amongst our staff and students.	Ōhanga-ora, Whanaungatanga 12 RESPONSIBLE CONSUMPTION AND PRODUCTION 13 CLIMATE ACTION

AUT's Landfill, Organic Waste and Recycling 2024 – Jan–June compared to July–Dec



MANAAKI SUSTAINABILITY

A group of Manaaki Scholars participated in a native tree planting session and a working bee at the māra kai (food garden) at South Campus. Inspired by their experience, the group has taken on the task of maintaining, harvesting and planting the mara kai, ensuring that the gardens are thriving. Across 25m^2 of garden they have planted broccoli, herbs, spinach, lettuce and cabbage. Guided by the principle of manaakitanga, they aim to honour the kindness and support they received upon their arrival in Aotearoa New Zealand through this simple but meaningful project. Manaaki Sustainability intends to grow their membership in 2025 and form two Green Impact teams (a sustainability behaviour change programme) to further contribute to sustainability at AUT.

2 ZERO HUNGER · 15 LIFE ON LAND

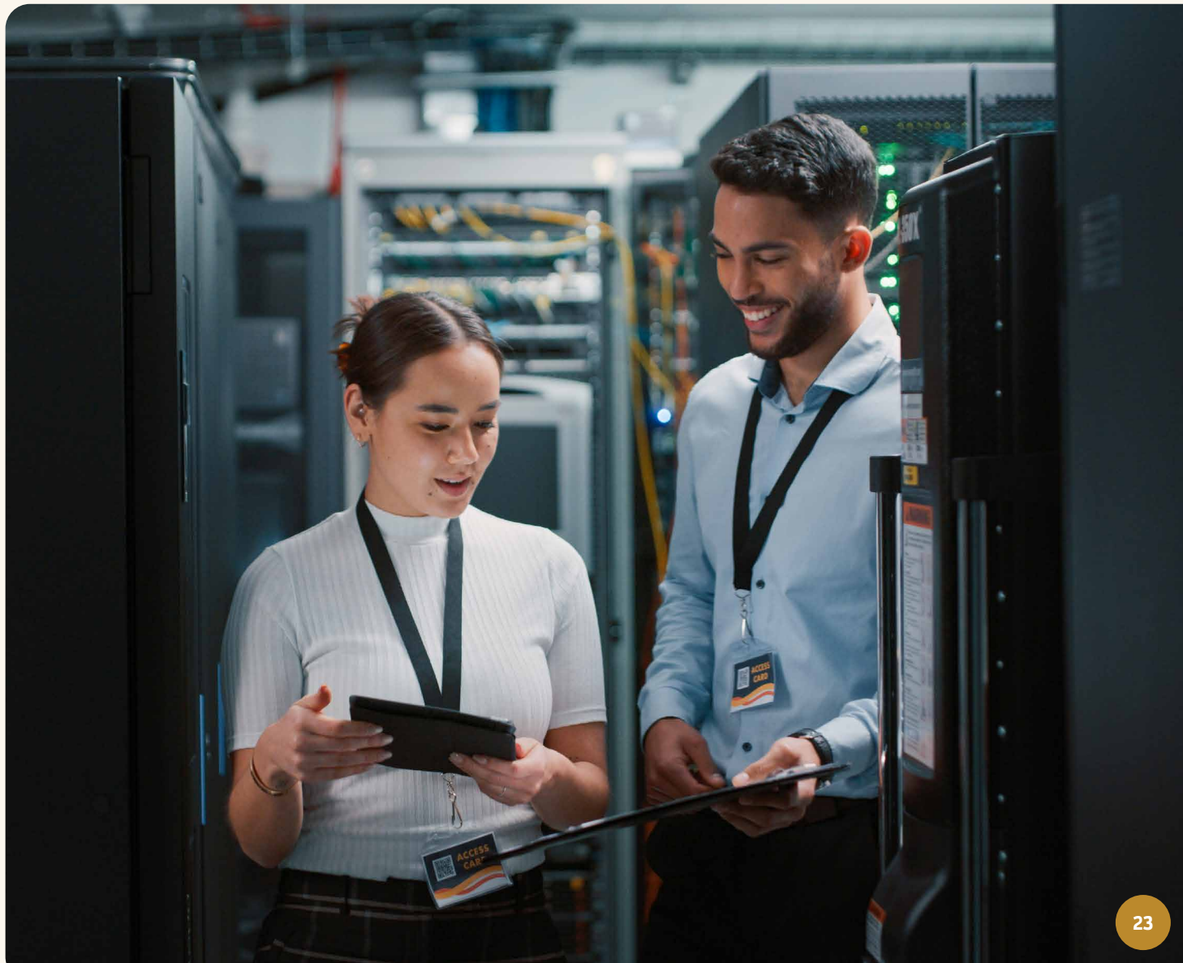
NEW PRINTERS ACROSS AUT

We replaced most of our printers with new Fuji machines, which were selected for their user-friendly interface, online print management portal, and their ability to support AUT's sustainability objectives. The new printers are more efficient than the old ones (using around 34% less energy) and we were able to reduce the size of the fleet as well. Overall, we have reduced printing from around 2.5 million pages in 2018 to around 0.5 million in 2024.

7 AFFORDABLE AND CLEAN ENERGY · 12 RESPONSIBLE CONSUMPTION AND PRODUCTION

THEME 5 - SUSTAINABLE ICT TARGETS TO 2025

TARGET	INFORMATION RELATED TO THE TARGETS	MAURI ORA COMPASS/SDGS
Carbon footprint of our ICT usage reduced STATUS: NOT ACHIEVED	Our data centre providers reported on the emissions associated with our use of Microsoft 365 for the first time in 2024. As a result our emissions from data have grown from 24 tonnes in 2018 to 70 in 2024. The additional CO_2e emissions are largely related to the inclusion of Microsoft 365.	Hihiri-ora, Whanaungatanga 13 CLIMATE ACTION
Improve the utilisation of computer hardware STATUS: IN PROGRESS	Operational efficiencies allowed AUT to reduce the number of ICT devices up for replacement to 2,322 a reduction of 259 (-10%). Throughout 2024 we replaced our older computer monitors with energy efficient versions and are now installing, where practical, monitors that have built-in docking and connectivity capabilities, removing the need for separate docking stations for laptop users. We continue to investigate options for centralised computer platforms that require less hardware (for example, monitors, keyboards) around campus and in the student labs, as well as reducing the electricity required by campus-based ICT equipment.	Hihiri-ora, Ki-tua 12 RESPONSIBLE CONSUMPTION AND PRODUCTION · 13 CLIMATE ACTION



MATERIALITY ASSESSMENT

STAKEHOLDER ENGAGEMENT

AUT's Sustainability team last conducted a stakeholder engagement with staff in late 2020, and separately with students in mid-2021. These engagements included a materiality assessment where we sought feedback on the most important aspects of sustainability. The common themes that emerged were waste, climate change, mental health and wellbeing, Māori values, and water. Another materiality assessment is required to understand if the significance of sustainability aspects for our stakeholders has changed.

Sustainability was also a critical part of the Te Kete consultation programme, where climate change and social responsibility featured strongly. These discussions will inform our new Sustainability Plan, and are also reflected in this report, through our case studies and the level of data provided.

ACKNOWLEDGEMENTS

Several academic staff provided strategic guidance and feedback during 2024, including the Co-Chairs of AUT's Sustainability Steering Committee, Deputy Vice-Chancellor Research Professor Mark Orams and Associate Professor Amanda Yates (Ngāti Rangiwewehi, Ngāti Whakaue, Te Aitanga a Māhaki, Rongowhakaata).

AUT's Strategy and Planning Team – in particular Amelia Adams and Ji-yeon Wi – provided data and analysis of the information, and Helen Rayner provided valuable comments and feedback about the report.

We welcome feedback and comments about this report.
Contact sustainability@aut.ac.nz with your comments.

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